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AN ADDRESS,

DELIVERED BEFORE

THE LAW ACADEMY OF PHILADELPHIA,

On the sixth of May, 1835.

BY WILLIAM RAWLE, Jr. Esq.

One of the Vice Provosts of the Academy.

Gentlemen of the Law Academy:

The objects of the Institution, whose exercises are now about to close for the season, being the advancement of those studies and the cultivation of those habits which tend to form its members for the profession they have chosen, the most appropriate theme for an occasion like this, would be the nature of that profession, its studies, its duties, its difficulties, its hopes and its rewards. A theme so appropriate and so pregnant with topics calculated to elevate the thoughts, to rouse ambition, and to give a youthful and aspiring mind, that direction, which, if diligently pursued must lead to distinction, could hardly have escaped the attention of those who have preceded me in the duty I am attempting to perform.

The necessity for close and unremitting application to the studies immediately connected with the profession, and the best methods of overcoming the difficulties by which they are surrounded; the advantage of mingling with severer pursuits, those of elegant literature and classic reading; of invigorating the intellect and enlarging its boundaries, by exploring the avenues of history, and investigating the *arcana* of science, in aid of a profession, which, in its practice, may touch almost every part of the circle of human knowledge; the doubts, the fears, the anxieties, which, after the noviciate of the student has expired, hang over the prospects of the practitioner's early career, and the bright gleams of hope, which from time to time break through the gloom, animating his exertions and restoring his energies; the duties which he owes to himself, to his client and the community in which he moves; the high moral and intellectual qualities which enter into the character of an accomplished lawyer, and the brilliant rewards which crown the efforts of him, who, "never weary with well doing," steadily pursues the path upon which he has entered, neither deterred by the difficulties he finds in his way, nor drawn aside by the allurements which lurk in its borders, have already, more than once been set before you, in a manner calculated to kindle your hopes, to stimulate your exertions, and successfully to direct your course. The field is indeed extensive and its products rich, but were I to attempt to follow those who have gone through every part of it, and reaped its abundant harvest, I should gather only the few scattered ears which they have suffered to remain upon its surface, adding little to the stores they have laid up for you, and exhibiting only the poverty of a gleaner. Leaving then the high road which you have already travelled with so much advantage, with those who have heretofore led your steps, let me invite you to enter one of those beautiful walks immediately connected with it, adorned with flowers, and decorated with every thing which tends to enliven and advance the journey you have undertaken—Let me recommend to you the cultivation of eloquence.

The reproach that the profession of the law narrows the intellect, and prevents improvement in popular speaking, however well merited it may be in another hemisphere, has no room in this. It is not my business to vindicate the character of the English lawyer from the aspersions, which some writers of his own country have cast upon it, but if it be true that few examples are to be found in the history of the English Bar, of comprehensive and varied knowledge, of largely developed mind, and of rich, powerful and cultivated eloqfience, the reason for these deficiencies may, perhaps, be discovered in the nature of the pursuits of the English practitioner, and of the studies by which he qualifies himself for them. Wherever the labourers are numerous and the divisions of labour minute, a high degree of perfection is attained in that part of it to which the attention of the individual is particularly directed; but the effort absorbs nearly all the power of his mind, leaving little to be applied even to other branches of the art. Thus it is in some measure in the profession of the law in the land of our ancestors. The extent of her population, and her wealth, renders the law, particularly that portion of it which relates to real estate, complicated, and its professors numerous. In the excess of competition, few can hope for success, without close application and pre-eminent merit in the business they undertake. Even family interest and patronage, which exercise so controlling an influence in the army and the church, can do little to advance the fortunes of him who seeks the distinctions of the Bar. They may furnish opportunities for the display of merit, but they can give to him who does not possess it, no hold upon public confidence. With a favouring gale, they may waft his bark from the shore, but whether she shall make a prosperous voyage, or sink into the sea of oblivion, must depend on his skill to direct his course.—In no profession does success so much depend upon actual merit; in no profession is there so little room for the arts of the charlatan, as in that of the law, in all its branches. Always before the public, subjected to the jealous scrutiny of his brethren, and exercising a calling intimately connected with the dearest interests of society, it is scarcely possible for the lawyer long to veil his real character, or to long enjoy an unfounded reputation. Hence the various branches of the profession, instead of being blended as they usually are in this country, are broken into distinct divisions, each calling for a distinct set of practitioners. The whole presents a magnificent garden, embellished throughout with every thing which its soil can be made to produce; but this exquisite culture is the result of undivided labour upon each particular portion of it, bestowed by a separate class of labourers, having generally very little knowledge of what exists beyond the immediate limits of their own allotment. The attorney and solicitor, confined to the mechanical parts of the profession, and the conveyancer buried in the dark intricacies of that system, which an artificial state of society and complicated family arrangements have introduced, may attain a point of perfection in his own department, seldom found in any member of the profession here, but he will

have little opportunity to pursue its more liberal branches, less to cultivate elegant literature, and none for the exercise of popular speaking. In the more elevated walks too of professional life, the same apportionment of the vineyard will be found. He whose duties call him into the Court of Chancery is seldom heard in those of the common law; and he who enjoys an extensive practice and commanding influence in the King's Bench, is known only by reputation in the Common Pleas. This limited sphere of employment, necessarily induces a limited range of thought and of study, and begets a sameness and poverty of manner, altogether incompatible with fulness of ideas, richness of language, and the graces of delivery. The immense mass of business, with which the dockets of the English courts are loaded, is another impediment to public speaking. The time of the court is so precious, that none can be spared for what is not absolutely necessary for the dispatch of business. A cold, dry, argumentative manner, consequently characterises the speaking of Westminster Hall, for he who turns aside to "catch a grace," is immediately recalled to the beaten path which leads directly to the point under discussion. Having little time for the attainment of enlarged knowledge, and little opportunity either for the cultivation or the display of eloquence in his own profession, it cannot excite surprise, that when the English lawyer is translated to another scene of action, he should be found deficient in those qualifications which are essential to distinction. His inability to cope on the floor of Parliament with those master spirits by whom its history is illustrated, has often been the subject of invidious remark. The reproach is in a great degree merited, but the causes which give rise to it are sufficiently obvious. Unfavourable however as is the atmosphere of the English courts for the growth of eloquence, there are many bright examples of its successful cultivation, sufficient to redeem the whole profession from the sentence which has been passed upon it. There have been some

> "Who on the tip of their persuasive tongue,
> Carried all arguments and questions deep;
> And replication prompt and reason strong,
> To make the weeper smile, the laugher weep:
> They had the dialect and different skill,
> Catching all passions in their craft of will."

ERSKINE was a lawyer: and if in Parliament, he disappointed those, who from his brilliant career at the Bar, anticipated success no less brilliant as a legislator, yet the powers of his mind, the splendour of his imagination, the copiousness and force of his language, and the fervor and persuasiveness of his eloquence, displayed throughout his forensic life, abundantly vindicated his profession from unmerited obliquy, and established for himself a reputation, which

> "Per omnia sæcula famâ
> (Si quid habent veri vatum præsagia) vivat."

MANSFIELD was a lawyer, whose enlarged and luminous mind spread light upon every subject on which it shone; and although none of his speeches at the Bar, and few of those which he delivered in either house, have been preserved in such a manner as to convey an adequate idea, either of the gracefulness of his style or the powers of his eloquence, yet the character of the "silver tongued MURRAY," both as a forensic and parliamentary orator, is scarcely inferior to that by which he adorned the elevated station of Chief Justice of the Court of King's Bench.

ROMILLY was a lawyer; mild, placid and dignified, his eloquence was as chaste, persuasive and impressive, as his mind was pure, enlightened and philosophic.

BROUGHAM is a lawyer, whose varied knowledge and bold and powerful eloquence enabled him to give full scope to an intellect which grasped and mastered almost every thing it touched, and not only secured to him extensive practice in this profession, and a commanding influence in the councils of the nation, but placed him on the Woolsack, the most exalted station in the gift of his sovereign.

It is unnecessary to produce other examples of illustrious men, the force of whose talents and acquirements has broken the trammels by which the profession is fettered in our mother country, and nobly vindicated the character of that profession from the charge of being inconsistent with liberal learning, enlarged intellect, and true eloquence.

The disadvantages, however, under which they laboured, have no existence in the country in which your lot has happily been cast. Free from the operation of those degrading distinctions of rank which measure a man, not by his moral and intellectual qualities, but by the circumstances in which accident has placed him, and strive to bind him down to the position in which he was born; with all the avenues to distinction open before him, and no obstacle to impede his march except collision with rivals pressing forward to the same point, no country ever presented such golden prospects, such captivating and magnificent rewards, to the persevering, the enlightened, the eloquent, and the aspiring lawyer, as that happy land, which we prodly call our own. It is the Paradise of lawyers. In every department of the community in which talent is called for, they are to be found, and the very prejudice, which unfortunately exists in some minds against them, is the most flattering, though certainly not the most agreeable tribute which can be paid to their merit. In all private and public institutions, of religion, of learning, of benevolence, of commercial enterprise and public improvement, in all the associations in which men unite, for the advancement of a common object, the influence of the profession is fully felt, if scantly acknowledged. In the legislative halls of every state in the confederacy, and in both branches of our national councils, the voice of the lawyer is heard, and carries with it a power which nothing can resist. The delicate duties and the high honors of diplomacy, and even the most exalted station in the power of a free people to confer, have drawn more from the ranks of our profession, than from those of all others united. To enumerate those members of it who have risen to distinction, would be, with few exceptions, to read the catalogue of illustrious men whose names are emblazoned in the history of their country. And to what is to be ascribed the enviable pre-eminence they have thus attained? The great engine by which they have raised this mighty fabric of influence and usefulness, is eloquence, which has enabled them to sway the passions, to direct the prejudices, to influence the judgment, and to master the will of mankind. Thus it has ever been in those countries in which the popular voice has given the direction to public affairs. It was eloquence which raised PISISTRATUS, the first who made the Athenians bend to its influence, to sovereign power; and the splendidly accomplished PERICLES, governed the destinies of the same refined and intellectual people, less by the arts of the politician and the skill of the commander, than by the force and persuasiveness of the orator. But the story of their lives, while it affords a striking example of the power of genius, supported and brought into action by the force of eloquence, furnishes a sad and salutary lesson upon the abuse of the best gifts of the Creator. They enslaved their country, and the glory which encircles their names, is shrouded and darkened by the reproach of selfish ambition.

In this country, every thing tends not only to stimulate the cultivation of the art of public speaking by the rewards it proposes, but to facilitate its improvement; and so long as we retain that patriotism and independence of mind which have heretofore marked our national character, we shall have no cause to apprehend the fatal consequences which in other climes have

sometimes attended the possession of popular talents.—Painting and eloquence are plants of spontaneous growth in our soil; but while the former languishes and sickens in its native atmosphere, the latter is nourished, invigorated and brought to healthy maturity. The names of West, Copley, Alston, Leslie, and many others, assert the undeniable claim of America to genius in the arts; but our free and equal institutions deny to it that fostering patronage, without which it cannot flourish, and it is compelled to seek in another hemisphere, under the sunshine of the hereditary wealth, and refined luxury of a liberal aristocracy, those hot-house influences which are necessary to make it blossom, bear fruit and ripen. But those institutions and habits of life which are so hostile to the success of the painter, are calculated to develope the powers, to advance the studies, and to form the character of the orator. However obscure his birth and humble his condition, the boy who feels his bosom throb with the divine impulse of genius, and is conscious of his strength steadily and perseveringly to pursue its direction, knows that there is nothing too brilliant for his hopes, nothing too exalted for his aspirations. His heart does not quail under the frown, or wither under the contempt of acknowledged superiors, and the icy influence of family power, cannot "freeze the genial current of his soul." His spirit bold, independent and unrebuked, carries him forward in spite of the puny efforts of envious opposition, to check his career.

The school in which a youth such as I have described enrolls himself, is a lawyer's office, where alone he can expect to pursue those studies, to form those habits, and to find those opportunities, which are to lead him to the objects for which he hopes. It is a school admirably fitted not only to instil into his mind that learning which immediately belongs to his profession, but to imbue it with those principles, and to fill it with that knowledge which will enable him, at a future period, to wield and to work, the most powerful engine in a republican country. Unrestrained to any branch of study, by being destined to make that branch of the profession to which it appertains his future pursuit, the whole volume of legal science is laid open to him, and he must read it, because in the exercise of professional duty, he will be called upon to apply almost all its precepts. The common law in all its modifications, the principles and practice of courts of equity, the civil and the ecclesiastical law, should be as familiar to him as "household words," for they all enter into the practice of the American lawyer. Connected with these, a deep and accurate knowledge of history, particularly of that of Great Britain, some acquaintance with the useful and even the elegant arts and sciences, familiarity with polite literature, and more than all, profound and frequent study of that sacred volume, from which are drawn not only the purest precepts of morals, and the divine duties of religion, but the richest and most abundant supplies of thought and language, are necessary to enable him successfully to perform the varied duties of his calling. All these objects may and ought to be pursued, in connection with his legal studies, during the probationary term of the student. With a mind thus prepared by previous discipline, he comes to the Bar, and mingles in those contests, which call forth his strength and exercise his powers. Obliged to embrace every variety of professional employment, every variety of professional talent is called into action. This diversity of objects to which the mind is applied, if it prevents that perfection which is attained by the pursuit of a few, tends to enlarge and improve the general intellect, and is particularly propitious to the cultivation of eloquence, the most valuable talent the American lawyer can possess. He who overcomes the intricacies of the science, stores his mind with juridicial learning, and makes himself familiar with its practical application, but neglects that art by which the heart is moved and the understanding convinced, may claim the merit of a sound lawyer, and may in time reap the rewards of a successful practitioner, but he cannot hope either for individual distinction, or to sustain the exalted character of his profession. He must be "content to dwell in decencies forever." To carry with him public feeling and public opinion, upon which alone reputation and success are built, and to rise to that eminence to which he ought to aspire, he must not only possess the treasures of his profession, but be capable of displaying them to advantage. He must "make his light shine before men." The value of the diamond is unknown and unappreciated, until it is unburied and made to sparkle to the eye. Depth of learning, soundness of judgment and skill in the management of business, will secure the confidence of those who are benefitted by these valuable qualities, and gradually enlarge the sphere of professional action; but if they be enforced by the persuasive and controlling powers of eloquence, full effect is given to what might lose part of their value, from not being properly brought into notice. Nor does the lawyer depend upon the favorable opinion of his immediate clients, or of those in whose circle they move, alone for advancement. He is before the public, who will judge of him by the manner in which he exhibits himself to them. Few have the opportunity or the capacity, to appreciate those powers, however great, which are exercised in the shade of the office, or shown, even in the skillful conduct of a cause in court, but all within the range of the speaker's voice may be enlightened by his arguments, touched by his pathos, delighted by his imagination, captivated by his graces, and carried along by the torrent of his eloquence. Such powers invariably command success. The importance then of cultivating this irresistable talent, cannot be too strongly impressed on the mind of the student.

But what is eloquence? It would degrade its exalted character to lend its name to that flippancy of speech, which indicates little more than the conceit of the speaker, or to that empty and showy declamation, which substitutes sound for sense, and glittering gewgaws, and tawdry tinsel for real jewels and sterling metal, or even to that artificial rhetoric, formed upon the rules of art, which springs neither from the operations of the mind nor the workings of the heart. The foundations of true eloquence, are a generous spirit, a pure heart, a sound head and extensive knowledge. "*Est eloquentiæ sicut reliquarum rerum, fundamentum, sapientia.*"—The same great authority from whom this sentiment emanated, himself the most illustrious example of the art he commends, declares that every virtue and every species of knowledge are necessary to constitute the character of an accomplished orator. To require so much, is to place the object beyond the reach of human effort. But it is obvious, that the further we advance in the path he points out, the nearer we shall approach to that which is too high ever to be reached. In the constitution of a forensic orator, a thorough acquaintance with his profession, and with all those branches of knowledge which are ancillary to it, is an essential ingredient, as well as full preparation for the particular cause in which he is to speak. Without these, even the powers of native and cultivated eloquence will be exercised in vain. He who possesses them, may enjoy a short lived reputation and ephemeral success, but real eminence and permanent distinction, are reserved for him who unites the attractions of the orator, with the solid and enduring qualities of the lawyer. The greater the depth from which it is drawn, the purer and more refreshing is the stream. That eloquence which is most felt and produces the greatest results, is bold, manly, and impressive; clear in conception, fervid in expression, energetic yet dignified in action; the eloquence, not merely of language or manner, but of thought and feeling. The rounded periods, the beautiful imagery and the graceful delivery of the artificial orator, may please the ear, amuse the fancy, and command the ad-

miration of the hearer; but they leave no lasting mark; the impression is effaced almost as soon as it is made, and the speaker and his subject, are alike soon forgotten. He bursts forth "like a bright exhalation in the evening," and like it, he falls and is seen no more. Even the splendid rhetoric of ISOCRATES, "*pompæ magis quam pugnæ aptior*," made little impression; while amidst a corrupt and fickle people, the bold, impassioned and natural style of DEMOSTHENES, embodying vigorous thought in the strongest language, disdaining the pursuit of vain ornaments, but seizing those happy illustrations which spontaneously presented themselves to his mind, borne down the subtle sophistry of all who opposed him, and the whole host of venal orators, backed by the wealth and power of PHILIP, trembled and crouched under the terrors of his voice.

Let it not be supposed however, that language and manner are to be disregarded. They are the channels through which the thoughts and feelings are to be poured forth, and as they are shaped the stream will flow. The importance of these attributes of eloquence, was appreciated by none more highly than by the great Athenian orator, the champion of his country's liberty. They should however, always be in accordance with the character, the cast of mind, and the mode of thinking and acting of the speaker. He who assumes the "trappings and the suits" which belong to one of a different form and stature is made awkward and ridiculous, by what confer grace and ease on their appropriate wearer. Hence the constant failure of those, who vainly striving to form themselves upon some popular model, neglect the developement of those talents and the improvement of that species of eloquence, which properly belong to themselves. He who by nature possesses a free elocution, a sprightly fancy and an easy and graceful delivery, will speak with effect, because he speaks according to the impulses of his nature; but he who captivated by these glittering displays and popular applause which they command, omits to inquire into the character of his own mind, and the efforts of which it is capable, pursues a phantom he can never grasp, and exhausted in the chase, falls short of the point, which a just direction of his own powers, would have enabled him to reach. Imitation is the bane of excellence. As was said of the servile imitators of GARRICK, "those who always fol'ow, can never get before." A manner, whatever it may be, which is natural, and in unison with the character of him who employs it, will produce greater results, than the most successful imitation of the best model. Strength of intellect and force of character, are indicated by independence of thought and action; while slavish imitation is an unerring denotement of conscious inferiority; for he who borrows from another, acknowledges that he possesses nothing of his own. Whatever is done naturally, is in general done well, and it is only by violating nature and attempting to assume what she has denied to us, that we show our weakness and make ourselves ridiculous. Vanity may induce one to believe that he has transferred to himself some portion of that admiration justly bestowed upon him whom he attempts to follow, and even to imagine that what he has stolen from another, belongs to himself; but the deception does not extend beyond him who practices it. Those who witness his awkward efforts, are aware of the cheat, and like the poor daw in the fable, he is ultimately exposed to ridicule and contempt. The effort therefore of every one who looks for eminence, should be to ascertain as far as possible the tone and character of his own mind, and the manner in which it can be most effectually brought into active operation. The diligent and persevering cultivation of the powers he feels himself to possess, and the display of them in a manner easy, natural and unaffected, will make him more truly eloquent, than the closest imitation of the most brilliant orator.

But nature is not in this respect, to be left entirely to herself. She gives the material, but it is to be worked up into the best form, by him on whom she bestows it. Without strenuous and untiring efforts to improve them, her choisest gifts are bestowed in vain. The vine which left to itself creeps upon the ground or straggles wildly over bushes and brambles, when pruned with judgment, and trained by the hand of taste, delights us by its beauty, and protects us by its shade.

It is a source of the most encouraging and pleasing reflection, that no faculty is more susceptible of improvement, than that of public speaking. The genius of the poet, is the inspiration of nature; but the orator is in a great degree the work of his own hands. Diffident, embarrassed and sinking under the weight of his early efforts, if he has courage and perseverance to go on, he finds his strength increase, his faculties develope themselves, and his success far beyond what he ever hoped for. There are few sensations so delightful as those which attend the conscious expansion of the youthful mind, as light breaks in upon it, new ideas are generated, and the intellect is gradually unfolded.—These emotions are not unlike those which are experienced, as the powers of speaking are developed, improved, strengthened, and confirmed. Without referring to those examples of successful struggle with difficulties, whose celebrity has made the subject trite, many instances might be pointed out in our own country, and even without going beyond the limits of our own Bar, of those who from the most unpromising beginnings, have become effective and successful, and some of them eloquent and powerful speakers. Let then the success of others be an encouragement to those, who feeling the difficulties they have to encounter, are disposed to shrink from the exertions by which alone they can be overcome.

It has been too often supposed, that the character of a profound lawyer is inconsistent with that of an accomplished and brilliant speaker. The suggestion is a slander not only upon the profession, but upon the human mind. The most stately and magnificent edifices are erected upon the broadest and most solid foundations, and the most abundant and fertilizing streams are poured out of the deepest reservoirs. How can the plant which springs from a meagre and arid soil, produce fruit either beautiful to the eye or pleasant to the taste? Professional erudition is one of the parents of professional eloquence, and he cannot be said to be truly master of his art, who does not possess both.—Such a combination, it is true is rare, and can only be the result of great natural gifts, cultivated and improved by close study and unwearied effort. But that such a happy combination may exist, there are too many examples to be denied. A single one is sufficient to illustrate the truth of the position. PINCKNEY was as deeply skilled in all the varieties of legal learning, even in its most technical branches, as he was rich and elegant in language, exuberant and splendid in imagination, and fervid and imposing in delivery. It may be long before our halls shall again re-echo to eloquence like his; but the example of his labors and his success, may stimulate others to follow his footsteps, and to emulate his fame. In the Supreme Court of the United States, even the wisdom of that august tribunal was enlightened and instructed by the depth of his research, the clearness and logical precision of his arguments and the force of his reasoning; while the torrent of splendid and impassioned language which he poured forth, glittering with beautiful imagery and shining with the happiest illustrations, astonished and delighted all who heard him. His star has set, but the effulgence of his memory remains, the valued inheritance of the profession to which he belonged.

To that profession you also are destined to belong, and upon you will devolve the high duty of upholding its character. Capable of subserving the noblest purposes, and of being perverted to the worst use, its estimation in the public mind and its operation upon the

interests of society, must depend upon the conduct of its members. Integrity, purity, honour, extended knowledge and cultivated intellect, will secure to it that influence and respect, which hitherto it has justly claimed. Looseness of principle, trick, chicanery, neglected or ill directed talents, will not only consign the individual to whom such blots attach, to merited contempt and detestation, but sink and degrade the body of which he is an unworthy member. He who actuated by a generous ambition, without disregarding the duty which every man owes to himself and to his family, of securing an independence, makes honor and distinction the stars by which he shapes his course, will add jewels to the professioal crown; but he, who prompted by the meanest passion of the meanest mind, makes the acquisition of wealth the darling object of his heart, commits a professioal sin, which no professional talent or acquirement can redeem. He may receive external homage from those who acknowledge the truth of the maxim, that "faults that are rich are fair," but he can create an interest in no bosom but his own; and should an adverse wind blast his fortunes, those fawning flatterers who "hinged their knees, and let his very breath blow off their caps; praised his most vicious strain and called it excellent," will rejoice and triumph in his fall.—Avarice sucks up every generous impulse, and withers every noble effort.

Your profession has a right too, to claim from you scrupulous attention even to manners and personal deportment. Lightness, flippancy and frivolity; sarcasm, bitterness and ill temper; reserve, distance and hauteur, though they mark minds of widely different characters, alike interfere with the advantageous exertion of the best talents; while dignity, simplicity and kindness, accompanied by the independence of conduct, without which no man is respectable or worthy, create a disposition to promote the views and advance the fortunes of him who possesses them.

Nor are the qualities to which I have referred without a direct influence upon the successful exercise of that branch of professional talent, the cultivation of which I am endeavoring to urge upon you. The effect produced by the speaker will always be proportioned to his personal dignity, moral excellence and weight of character.

To point out in detail the course of study, and to indicate the exercises most conducive to success in the pursuit recommended to you, is unnecessary and would perhaps be improper. The sources of instruction are abundant and accessible, and there are few which promise more effectual aid to him who is determined to excel, than close attention to the duties, and assiduous performance of the exercises, of this excellent institution,

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From the Pittsburgh Gazette.

ORPHAN ASYLUM.

At the 3d annual meeting of the Orphan Asylum Society of Pittsburgh and Allegheny, held at the room of the Young Men's Society, on the 12th of May, 1835, the Rev. Dr. Herron was called to the Chair; the business of the meeting was opened with prayer, by the Rev. Mr. Elliott, when the following Report of the Managers of the Society was read and adopted:

The Managers of the Orphan Asylum Society, in presenting to the friends and patrons of the Institution, the third annual report of its concerns, would express their grateful acknowledgments to the Father of our mercies and God of all grace, for the kind protecting care with which He has encircled this object of your benevolence. It is not necessary here to recapitulate from what scenes of misery, want, and degradation, your helping hand has rescued many of the children now before you. Look at these interesting groups—their cheeks glowing with health, and their eyes sparkling with gratitude to you, their benefactors. Compare them, in your minds, with the squalid vagrants who infest our streets, worse than fatherless and motherless—whose parents are living examples of vice and infamy—for whose precarious subsistence they beg a scanty pittance from your doors, and you will feel that your benevolence has not been misapplied.

The Orphan Family consist of twenty three children. During the past year, they have been visited with more cases of disease than formerly, yet as few as could be expected from the accession to their number and the neglect and suffering which preceded their admission. In the summer, Cholera Morbus and other complaints incident to children and the season; and in the course of the winter, ten or eleven were attacked with Measles, but all terminated happily. Hitherto, it has not been "the will of our Father in Heaven that one of these little ones should perish;" the destroying angel has never yet been permitted to visit our Asylum. Twelve have been received, and four have been bound to respectable places since our last report.

In giving an account of our stewardship, we would first advert to the favors received. How much we are indebted to the Reverend Clergymen who have aided us by appropriate sermons and contributions in their respective congregations, can only be estimated by contrasting their charities with the diminution of our subscription list. This falling off has been to us a subject of painful solicitude. To what can it be attributed? We appeal to you, our friends and fellow citizens—your hearts have not grown cold to the child of sorrow—you could not turn a deaf ear to the wailings of a desolate infant—you would not say to the tattered, shivering, famished orphan, be ye fed and be ye clothed, then go your way without providing either food or raiment. We believe you have no reason to doubt the judicious application of the moneys committed to our trust as almoners of your bounty—our accounts are annually the subject of your investigation, and at all times open for your inspection. For the last twelve months, our subscriptions and donations have amounted to $445 97 only, while the expenditures of the year for house rent, maintenance of the family, including the salaries of the matron, teacher, &c. have been $621 30, as exhibited in the Treasurer's report. We cannot, for a moment, admit a suspicion that your sympathies are chilled, nor can we rest satisfied without ascertaining, if possible, the cause of this apparently lessening interest. May it not proceed from a wrong impression that we have accumulated a permanent fund which renders us independent, and precludes the necessity of annual supplies? If so, the error must be corrected.—Our treasury is in your bosoms. Our permanent fund is that benign, unwasting principle in the hearts of our fellow citizens, which is strengthened by the assurance that "it is more blessed to give than receive." The Board cannot here omit an expression of their deep sense of obligation to Dr. Dale, whose professional attendance has been promptly, faithfully, and gratuitously given, under all circumstances when requisite, from the first opening of the institution to the present period. We also thankfully acknowledge the benefit given by the "Allegheny Musical Society."—And here, justice, as well as gratitude, requires the notice of a donation of fifty dollars, contributed by a few gentlemen, the friends of David and William Sproat, in 1833—which, by an oversight, was not communicated to the Secretary for the report of that year.

The purchasing committee have also reported donations in provisions, clothing, medicines, fuel, &c. &c., from various sources, for which liberality we are sincerely grateful. For the good order of our establishment, and improvement of the children, we will say nothing, but invite you to visit the Orphan House and judge for yourselves. While this institution was yet struggling into existence, during a period of its greatest need, the benevolent regards of the late Mr. Mary O'Hara were liberally extended to its aid, nor were

these helpless objects of her bounty while living, forgotten in the closing scene of their generous benefactress. Mrs. O'Hara, by her last will, directed to be conveyed to the Pittsburgh and Allegheny Orphan Asylum Society, a lot of ground in the vicinity of the city, valued at $2,000 which has been faithfully complied with by those who have the charge of her estate. This legacy will hereafter teach the stranger that in generations past there was one, whose heart was the seat of human loveliness, and who was the Orphan's friend. The dew drops of the morning, while they glitter on the rose bud reflecting the brilliant sun beam, are softening the petals and assisting the expansion of the flower until all its parts are fully developed and its fragrance is under proper culture, may not only exhale a healthful moral influence here, but beyond the limits of this frail being continue to expand, "Through endless ages into higher powers," withhold not then, we beseech you, those little annuities, which, in the aggregate, like rain drops running together, form a stream of benevolence of vital importance to the Orphan Asylum.

Mary Robinson, Treasurer, in account with the Pittsburgh and Allegheny Orphan Asylum Society—balance from last year, viz:

Proceeds of Fair in 1833, (now loaned on interest)	$1800 00	
Cash on hand,	205 12½	$2005 12½
Donations and subscriptions received during the past year,		445 97
Collections in churches during the past year:		
1st Presbyterian Church,	115 31	
2d do. do.	39 00	
Dr. Pressly's do.	24 72	
Methodist Episcopal do.	31 00	
Rev. Mr. Kerr's do.	54 56	264 59
Allegheny Musical Society,		71 63
Proceeds of Fair, December 31, 1834,		437 60
Interest on money loaned,		108 00
		$3332 91½

Cr.—By amount of current expenses, including house rent, matron's salary, and household expenses,	$ 621 30
Amount invested on interest to be appropriated towards building a permanent Asylum,	2400 00
Cash on hand, to be appropriated in same way,	311 62½
	$3332 91½

The meeting then listened with deep interest and instruction to an eloquent and feeling address, delivered by the Rev. Dr. Lacey, on the obligations of charity, and the claims of the destitute orphan to its bounties.

A brief and appropriate address was then made by the Rev. Mr. Elliot, and the Society proceeded to the election of Managers for the ensuing year, when the following ladies were chosen.

Mrs. Harmar Denny,	Mrs. Montgomery,
" L. Halsey,	" Sellers,
" Upfold,	" W. F. Irwin,
" Wm. Robinson,	" Young,
" Bruce,	" Wm. Hays,
" Wade,	" M'Cormick,
" M'Clure,	" Mason,
" Campbell,	Miss Herron.

It was *Resolved*, That the thanks of this meeting be delivered to the Rev. Dr. Lacy, for the address just delivered, and that he be requested to furnish a copy for publication.

May 15th.—The Managers of the Orphan Asylum Society met this day and proceeded to the election of officers, when the following persons were elected:

1st Directress—Mrs. Denny;
2d Directress—Mrs. L. Halsey;
Treasurer—Mrs. W. Robinson;
Secretary—Mrs. Campbell.

Resolved, That as the receipts from subscriptions during the past year were insufficient to defray the currens expenses of the orphan family, committees be appointed to call on the citizens of Pittsburgh and its vicinity, and solicit their *increased* and prompt aid.

From the U. S. Gazette.

CITY COUNCILS.

The following petition was presented to Councils at the meeting on Thursday evening last, and referred to the Finance Committee with power to act.

To the Select and Common Councils of the City of Philadelphia.

The memorial of the Board of Managers of the Philadelphia Exchange Company, respectfully represents:

That your memorialists on the 17th day of January, 1834, borrowed from the city, as trustees of Wills' Hospital, forty thousand dollars, on an interest of 5½ per cent, secured by mortgage on the Exchange building, redeemable in 5 years. Exclusive of said building the company have a property on the south side of Walnut street, which cost eighteen thousand dollars.

The funds of the Company not being sufficient to meet all their engagements, certificates of loan were issued for nearly twenty thousand dollars, which your memorialists are now desisous of paying off, by obtaining that additional sum on mortgage, and the only difficulty in procuring the whole sum of sixty thousand dollars, is the mortgage to the city, as capitalists object to loaning on a second mortgage,

They therefore respectfully request permission to pay off the said loan made to the company from the Wills' Hospital. They have however understood, that a sum of nearly twenty thousand dollars, belonging to the trust funds of the Wills' Hospital is uninvested, and should it be preferred to increase the mortgage now held by the city from forty thousand dollars to sixty thousand dollars, it would meet the wishes of your memorialists. They beg leave to submit the annexed statements, and remain respectfully,

W. YARDLEY, Jr.
WM. D. LEWIS,
SAM. COMLY,
ST'PN. BALDWIN,
On behalf of the Board of Managers.

Philadelphia, June 11, 1835.

Cost of ground plot	$98,000 00
" of Exchange building	184,000 00
" of property on south side of Walnut street	18,000 00
	$300,000 00
Principal of ground rents	23,000 00
Stockholders	206,700 00
Certificates of loan	19,700 00
City of Philadelphia	40,000 00
Balance of rents and subscriptions, after paying current expenses, which have been applied to buildings	13,000 00
	302,400 00

The annual income and expenditures are estimated as follows, viz:

RECEIPTS.

Amount of rents	11,400 00
Subscriptions to Reading Room	9,000 00
From letters and sales at aution	1,000 00
	21,400 00

EXPENDITURES.

Interest on $60,000 at 5½ per cent	3,300 00	
Ground rents	1,380 00	
Taxes	800 00	
Salaries and wages	2,900 00	
Newspapers and postage, fuel, oil and incidental	2,400 00	10,780 00
Balance for stockholders		$10,620 00

About five per cent on $206,700 00—amount of stock.

We some time since called the attention of our readers to some experiments of speed on the Paisley Canal, and now extract the following notice of a similar experiment at Rochester, N. Y.

UNPARALLELED SPEED UPON THE CANAL.

On Saturday, some forty or fifty of our citizens took a ride upon one of the new line Packet Boats, designed to run between this city and Buffalo.—The boat is made considerably narrower than the ordinary packets; is exceedingly light, and finished in the most elegant manner. It is a sample of the workmanship of our enterprising fellow citizen, S. C. Jones, who has for some time, we understand, being of opinion that a boat might be so constructed as to be drawn by horse power, at the rate of 10 or 12 miles to the hour. The test on Saturday was a deligthful realization of the fact. Although the horses were unaccustomed to the business, and for four or five miles of the distance, were exceedingly fractious and hard to manage, the ride was completed in two hours and thirty-four minutes, a distance of twenty-four miles, including changes of horses and a short stop at Spenser's Basin.

It is found by experiments, that when the boat is propelled at the rate of seven and a half or eight miles to the hour, it rides upon the swell, creates less commotion in the canal, than the common packets at 4 miles to the hour, and requires, we believe, about the same power to draw it. An enterprising company has been formed to run a daily boat of this size to Buffalo, leaving Rochester after breakfast and going through by daylight, a distance of ninety-five miles! This will be "going ahead," on the "rail road principle," and those who are going from this to Buffalo, or from Buffalo here, we think it will not be difficult to say *how* they will go. —*Rochester Democrat.*

From the U. S. Gazette.

THE WEATHER.

During the last eight days, the weather has been variable. On Monday, Tuesday and Wednesday mornings, a little fire would have felt comfortable. On Friday evening, the 12th, the whole atmosphere was highly charged with electric fluid, attended with some thunder and rain.

On the 13th, during mid-day, the mercury stood at 84.

On the 14th, cool, and showery during the day.

On the morning of the 15th, very cool, mercury at five o'clock, had sunk to 53, and during the whole day it could not get above 70, which is six below summer heat.

On the 16th, at 5 o'clock, mercury 55, but at mid-day it rose to 74.

On the 17th, at 5 o'clock, mercury 59, but it rose to 74.

On the 18th, at 5 o'clock, mercury 60, but rose to 76 during the day.

On the 19th, at 5 o'clock, mercury 65, but rose to 85 during the day.

WEST BRANCH DIVISION.

REPORT OF J. D. HARRIS, ENGINEER.

Canal Office, Jersey Shore,
October 30th, 1834.

To William F. Packer,
Superintendent of the West Branch Division Pennsylvania Canal.

Sir—In obedience to the directions of the Board of Canal Commissioners, as communicated in the letter of their Secretary, dated the 9th inst. I herewith transmit to you the tabular statements exhibiting the details of my annual report, in relation to the upper division of the Lycoming line.

In complying with the usual requisitions of the Board, at the close of the year, it gives me pleasure to congratulate you, and all friends to the success of this branch of the State improvements, on the completion of the whole line to its junction with the Bald Eagle creek. And although this event, so long looked forward to as an epoch in the history of this portion of the State, has not transpired so early by about one month, as was hoped and expected at the date of my last annual report, yet the work has been consummated in time to admit of the passage of the water throughout the whole length of the line before the setting in of winter, and to afford an opportunity to make such test of the work as justifies the belief that the exertions on the part of the State agents to construct the work in a permanent manner, have not been misdirected.

The water was first admitted into the Bald Eagle side cut on the 4th of July. It has been in constant navigable order since the first of September, and it already begins to give evidence of its importance to the neighborhood, in the traffic which has been commenced between the coal mines and the Bald Eagle valley, chiefly in the transportation of Coal to the Bald Eagle, and in carrying back iron, pigs, castings, lime, agricultural products and merchandize.

The water was admitted into the canal through the guard lock at the feeder dam, on the 15th of September. Owing to the dryness of the weather, when the water was first admitted, and its continued dryness up to the present time, the process of filling the canal has been tedious. The quantity of water let in has been governed by a due regard to the safety of the banks; and it was thought better to submit to censure for over-caution in admitting the water, than to incur the risk of breaches, by letting in a full supply at once. The water has therefore been admitted so gradually, that all defects in the banks might be detected and secured before filling the levels. The supply of water drawn from the feeder dam has been gradually increased, and in such ratio as appeared safe under existing circumstances. The depth of water admitted into the canal at the guard lock is now four feet eight inches, which is passed principally through the paddle gates. It is proposed to increase the depth in a few days to five feet, by opening the large gates of the lock. It may not be improper here to remark, that the average capacity of this canal considerably exceeds that of the Pennsylvania canal generally. In all cases where it could be done without much addititional expense, it has been widened beyond the ordinary breadth. A great portion of this canal is forty-six feet in breadth at water line, instead of forty, the usual breadth. This fact is stated in order to give some idea of the quantity of water required to fill a canal of this dimension, as compared with others of less capacity.

Subsequently to the date of my last annual report, the feeder dam of the Lycoming line has been completed; and judging from the slight effects produced by the floods which have taken place since its completion, there is no reason to apprehend that the advocates of this structure will be disappointed in relation to its permanency. With regard to the chute of the feeder

dam, its loudest opposers are obliged to acknowledge that it is as safe as any other part of the river. The dam and chute were completed in the month of December last.

Whilst speaking of chutes, it may not be irrelevant to state that from observations made, the conclusion has been formed that the following requisites are essential in the construction of a permanently safe chute, where the dam is of considerable height, viz:

First. That the bottom of the river at the tail of the chute consists of a solid rock, or artificial foundation, which cannot be disturbed by the action of the water; and that this bottom extend for a distance of from two hundred to five hundred feet below the termination of the chute, in proportion to the height of the dam.

Secondly. That the chute have a sufficient length in proportion to the height of the dam--the length of the chute increasing in a geometrical ratio with the direct increased height of the dam.

Thirdly. That no greater depth of water be admitted at the head than is barely sufficient to carry the craft through at the lowest flood, suitable for craft to run in the river.

Those appear to be the chief and leading objects to be attended to in those erections, and are stated as the result of much reflection on the subject, in the hope that they may afford some small degree of aid in the construction of such works.

During the winter, ice had formed on the pool of the feeder dam, of about ten inches in thickness, and on the river generally, of sufficient thickness to admit of the crossing of wagons upon it. In the month of January this ice went off with a freshet, which rose generally ten to eleven feet above low water mark. No damage was done by this freshet to any part of the work, except that of taking off about one hundred and twenty feet of the breast plank of the feeder dam. This part of the breast has since been renewed, together with the lower range timbers, which parted and went off with the breast plank, and the whole has been more thoroughly secured by means of strong iron bridles, and by bolting the whole of the breast plank to the range timbers, with iron bolts one inch square. The quantity of iron alone for addition and repair, amounts to fourteen thousand three hundred and fourteen pounds. The breast plank consists of a double course of five inches thick, oak and hemlock. The troughing below the dam has not progressed so far as to render any additional crib work necessary for its security as yet. It seems probable, however, that a course of crib work on the plan recommended in my report of last year will be required at a future day.

The waters of the river having fallen during the latter part of the summer to a very low stage, proved the necessity of an additional course of travelling, to keep up the water to a sufficient height in the pool of the feeder dam, to afford a supply for the canal and for the preservation of the timber work of the dam. The waters, in the month of August, had fallen to the depth of two feet below bottom of canal in the pool of the dam, or seven feet three inches below the comb of the dam. The work of gravelling having been thrown open to all who might deliver gravel at the price fixed, and measured in the flats, a sufficient number were at once engaged, and the work was speedily completed, so as to raise the water fairly over the comb, at the same time affording a supply for the canal, without any material aid from the Bald Eagle. A small expenditure may be required yearly for some time in tightening the dam.—By judicious management it may be kept full at all times, more especially if the supply which may be obtained from the Bald Eagle is resorted to. The quantity of gravel put into the dam this season, is twelve thousand four hundred and ninety-six yards.—Before the gravelling was commenced, the stone filling of the dam for the depth of about fifteen inches, was broken after the fashion of turnpike work, so as to render it as compact as possible, and in order that it might hold the gravel filling placed on the top of it.

Considerable repairs have also been made to the chute during the past season, rendered necessary by the effects of the spring freshets. A quantity of stone filling was put in to secure the foundations of the side walls, and in order to level and smoothen the bottom. The head of the chute was paved, and a frame constructed for the purpose of shutting the water out of the chute at a dry time. The shore wall of the chute was extended three hundred and thirty feet at the tail, and carried up to a height corresponding with the adjoining wall.

The whole of those additions and repairs at the dam and chute, amount to the sum of nine thousand eight hundred and eleven dollars and fifty-one and a half cents.

The tabular statements accompanying this report are intended to show, as far as practicable within the limits of the tables—Firstly, the amount of each item of work, excavation, embankment, &c. on each job, together with the actual cost of each. Secondly, the actual total cost of the work done under each general head, sections, aqueducts, &c., and lastly, the total cost of the whole work on the upper division of the Lycoming line, including the feeder and Bald Eagle side cuts.

The total cost of the whole work, as will appear from the general abstract statement, amounts to		$811,332 97½
By referring to the report of last year, it will appear that the gross amount of the estimate for completion, was	$869,168 74¾	
From this deduct the estimated cost of a towing path bridge at the feeder dam, an outlet lock at Reed's run, and a guard lock at the Blue Rock, submitted for the decision of the board and deducted,	38,000 00	
		831,168 74¾
Surplus applicable to the payment of engineering and office expenses,		$19,835 77½
The total cost of the upper division of the Lycoming line, including the feeder, as per my present report, is		$764,056 19¾
Work done not included in the estimate of the last year, viz:		
Guard gate at Blue Rock,	$4,527 05	
Bridge at Muncy town, (Hanna's,)	495 35	
Culverts at Muncy town, (Hanna's,)	449 61	
Repairs and additions to dam and chute,	9,811 51½	
Do. sections 47, 48, 49, Rip Rap, &c. to protect against the river,	1,739 02	
		17,022 54½
Total cost of work estimated last year on the upper division of the Lycoming line and feeder,		$747,033 65¼
The total cost of Bald Eagle side cut, as per my present report, is		47,276 77½
Work done not included in estimate of last year, viz:		
Lock house at Bald Eagle guard lock,	$511 98	

Shore wall below chute, (Bald Eagle dam,)	837 85	
Waste wier on section No. 2,	387 71½	
		1,737 54½
Total cost of work estimated last year on Bald Eagle side cut,		45,539 23
Amount upper division, &c. brought over,		747,033 65¼
Amount,		792,572 88¼
	869,168 74¾	
	38,090 00	
Total estimates of same work,		831,168 74¾
Surplus,		$38,595 86½

The work embraced in the tabular statements shewing the cost of the line, does not include the sum necessary for the protection of sec. No. 31, and lock sec. No. 4. from the encroachments of the river. The canal at this place is located so as to leave a strip of land between the canal and the river, sufficient for the protection of the canal at the present time. Under this belief, and the knowledge that this part of the line could be protected more cheaply after the admission of the water than during the construction of the other work of the sections, this part of the river bank about thirty-five chains was left in its original shape. Since letting in the water, the soakage from the canal has caused the bank to slip between the towing path and the river, and its immediate protection is advisable. The protection should consist of a rip rap wall, the stone for which can be procured at the rock sections two and one-half miles higher up the river, close to the bank of the canal. The estimate for the completion of this protection in a permanent manner, is as follows:

Excavation, slope,	5,000	10	$500 00
Rip rap,	12,000	40	4,800 00
			$5,300 00

A similar protection on section No. 9, would also in my opinion be a judicious work. At this place there is barely room for the main road between the canal and the river. The soakage from the canal has converted the road into a quagmire, and both the preservation of the road, and the complete protection of the canal seem to require that the bank should be secured with a rip rap, or other wall. The estimate for this is as follows:

Excavation, slope	1,000	10	100 00
Rip rap,	2,000	50	1,000 00
			$1,100 00

About twelve hundred rods of fence yet remain to be made in order to place the land holders throughout the line on the same footing in this particular. They have themselves held the contracts for making the fence, but as it was not made, it was not included in the statements shewing the cost of the work. This fence if made will amount at one dollar per rod to twelve hundred dollars.

Very respectfully your obedient servant,

JAMES D. HARRIS,
Engineer, upper division, Lycoming line.

REPORT OF R. FARIES, ENGINEER.

To William F. Packer, Esq.
Sup't of the West Branch Canal.

Sir:—To enable you to report the transactions upon your line, to the Board of Canal Commissioners, for the year ending the 31st October, 1834—the following information is respectfully furnished.—It comprises all that is required from the engineer department, in relation to the old line and the lower division of the Lycoming.

The lower division of the Lycoming line commences at a point thirty-two perches west of the Lycoming creek and terminates in the pool of the Muncy dam, two miles and two perches below the out let locks. Fifteen miles and one hundred and fifty-two perches of it is a canal, the residue is a towing path formed along the pool. From the point of intersection with the "upper division," to Lock No. 5, the distance is seventy-seven perches. The ground passed over, presented serious difficulties; embankments had to be raised varying in height from five to twenty-three feet, and an aqueduct built four hundred and twenty-two feet in length, including the wing walls; the abutments and piers of the aqueduct are faced with lime stone neatly dressed and laid in regular courses; the superstructure is straight stringers with balance beams and under braces; there are seven spaces for the water of the creek to pass through, forty-two feet in the clear, each.

The level commencing at lock No. 5, passes through the town of Williamsport, and terminates at Lock No. 6, on the west bank of Loyalsock creek. It is five miles and one hundred and thirteen perches in length; five small streams are crossed with stone culverts, the aggregate of their spans is thirty-six feet. A cast iron pipe passes under the canal to drain a part of the town, its calibre is sixteen inches; nine farm and five public bridges have been built over this level.

The Loyalsock is taken in as a feeder. Heavy embankments are carried over the low ground in the vicinity of the creek, and two dams built; one across the main channel, four hundred feet in length, the other across a branch one hundred and four feet. At the branch a towing path bridge is built upon bents, the superstructure is one hundred and fifty feet in length. The "Mitchell bridge," crosses the main channel, the abutments and piers are limestone, dressed, and laid in courses; the space between the abutments is three hundred and four feet in the clear, which is subdivided into three spans, two of eighty feet and one (the centre span) of one hundred and twenty feet chord. The plan of the superstructure is a combination of the permanent bridge at Philadelphia, and of Pope's lever bridge; the floor rises in its whole length four feet six inches, it is effectually caulked and well pitched, so as to protect the under work from the weather, the smaller spans have versed sines of six feet, the larger has a versed sine of nine feet.

Taking the superstructure in connection with the wing wall, the whole length of the bridge will be four hundred and thirty-four feet. From the creek to lock No. 7, ordinary ground is passed over, the distance between lock No. 6, and lock No. 7, one hundred and eighty-six perches, it has but one public bridge.

Lock No. 7, answers the purpose both of a guard and lift lock, continuing on, the canal passes over favorable ground until it approaches the east line of John Andrew Shulze's farm, at which place a heavy embankment is raised across a channel of the river, from whence the towing path is carried along on "Spring island," until it arrives within a few rods of lock No. 8, where the first land is again resumed, upon this level four bridges occur, two with abutments alone, one with abutments and one pier, and one with abutments and two piers, length of level two miles one hundred and twenty eight perches.

Pursuing the bottom land, the ground was remarkably favorable for a canal; but one six foot culvert occurs until "Armour's run" is reached, where another of similar chord is built. After crossing the run, embankments had to be raised for nearly a thousand feet, from eight to twenty-three feet high; and within a few hundred feet, again, embankments had to be raised twenty-three feet in height, and nearly four hundred feet in length, and a culvert of twelve feet chord built over "Carpenter's run;" the canal then continues along a

side hill, and through deep cutting until it reaches Lock No. 9—this level has also a culvert under it of six feet chord, to convey water to the mill of Robert C. Hall, and one public and six farm bridges crosses it.—It is three miles and three hundred and eight perches in length. A basin twelve rods long is formed between locks No. 9 and 10.

Immediately after leaving Lock No. 10, "Hall's Bluffs" set in, and are passed by a wall and embankment fifteen hundred and one feet in length, and twenty-two feet high above the water of the river.

At the lower end of the "Bluffs," the Muncy falls commence, where every facility for a cheap canal was afforded until the creek had to be crossed; here difficulties beyond what was at first anticipated, had to be encountered. On the west side of the creek the rock made its appearance, and it was confidently believed that it could be got at to found the abutments and piers for an aqueduct the whole distance across; this idea, however, proved fallacious, for after several unsuccessful attempts to get to the rock on the east side, that abutment and the pier next it had to be founded upon cribs; they are well secured with heavy rip-rap, and a crib sunk immediately below filled with heavy stone.

The distance between the face of the abutments is one hundred and ninety feet sub-divided into four spans of forty feet, each, in the clear; the remaining part of the space is occupied by the piers. Notwithstanding the unforeseen difficulties the water was passed within a few days of the time contemplated in my last year's report.

The flat below Muncy creek is considerably depressed below the level of the canal, it is crossed by heavy embankments, and a twelve feet culvert at "Glade run," upon which immediate relief is had, and the ground continues favorable until the canal arrives at Lock No. 11. Length of level two miles, two hundred and twenty-four perches, upon which there are three public and two farm bridges, there is also a four feet culvert under this level that drains a piece of low ground lying behind the borough of Muncy.

Between Lock No. 11 and No. 12, (the out lets) a large basin is formed sixty-four rods long, with an aggregate width of eighty feet. Boats may safely moore in this basin at such times as the river may be too high to venture into the pool of the dam.

The remainder of the distance of the lower division, two miles and two perches is towing path, formed partly along a slate bluff, and partly on the alluvial bank.

The tables show the amount of work done upon each section, and upon each item of incidental work, together with the names of the contractors.

The aggregate of the cost is as follows, viz:

For Sections,	$147,182 03¼
Dams,	14,684 12
Aqueducts,	30,328 66
Locks,	38,115 51
Public and farm bridges,	19,056 28
Towing path bridges,	16,063 72
Culverts,	10,432 61
Waste wiers,	1,951 36½
Lock Houses,	3,074 71
Miscellaneous work,	24,214 65¼
Fence,	8,955 37
	$314,059 03
Amount required to complete, for fence, etc.,	500 00
Total cost,	$314,559 03

The lockage in the whole distance is fifty-six feet, divided into nine lifts, viz: Lock No. 5, has a lift of four feet, No. 6, seven feet, No. 7, five feet, No. 8, six feet, No. 9, six feet, No. 10, six feet, No. 11, six feet, and No. 12, two eight feet lifts combined.

On the fourth of July, the first boat navigated the canal as high up as the Loyalsock, since which time that portion of the canal has been in good order, with the exception of a short period when the water in the creek was too low to feed, and it is gratifying to have it in my power to say, that no breach has occurred.

The remainder of the lower division will be fit for use in a few days; the water from above has already passed this place.

When I submitted you my report of 1833, the Lewisburg cross cut was so near being completed, that the water had been introduced. It has also been fortunate, in not having any breaches.

The whole cost is as follows:

Cost of work done by William Cameron, on canal, locks and dam, &c.,	29,739 75
Cost of work done by James Lee, on towing path bridge and embankment,	1,707 84
Cost of fence made by Abbot Green,	382 00
Cost of removing buildings by Rebecca Steadman,	200 00
Total cost,	$32,029 59

Upon the line, the only work put under contract, except such as was done by the supervisor during the past season, was the weigh lock at Northumberland.

The amount estimated for work done, is	3,100 00
The amount required to complete, including buildings,	9,500 00
Total cost,	$12,600 00

The estimate made last year, was for a lock of wood and stone combined, the lock now being built is of cut stone, one foot of the bed and joints of the ashler, is laid in "Roman cement;" the residue of the walls is grouted with a cement manufactured from a substance taken from "Laries bluffs," on the West Branch. The superiority of the work, when completed, will fully justify the increased expense.

By a resolution of the Board of Canal Commissioners, in compliance with an act of the legislature of last session, George Eckert of Milton, in the county of Northumberland, was permitted to take water from the canal for milling purposes, for which he is to pay the sum of one hundred and twenty-five dollars per annum, for four inches of water, four feet in width, drawn from the surface.

On the 20th of September last, the water was first introduced into his mill race; since which time, the mill has been supplied from the canal, with the quantity of water heretofore specified.

ROBERT FARIES, Engineer,
Northumberland and Lower division,
of the Lycoming line.

WILLIAMSPORT, October 29, 1834.

TO THE CITIZENS OF PHILADELPHIA

The undersigned were appointed, under a resolution of a General Town Meeting, held on the 3d inst., to prepare a Remonstrance to the City Councils against a project submitted to them, for removing the Market House from High street.

The project referred to did not originate in any petition to Councils. It was a mere suggestion, embraced in a Report of certain Commissioners, who were appointed by Councils to consider the best mode of conveying goods to and from the Broad street Rail Road to the wharves.

This Report has been before Councils for about a month, and no attempt has been made to carry the proposed change into execution. So far as public opinion has been expressed, it is known to be hostile to the removal of the Market Houses. The undersigned cannot suppose that Councils will be so unwise as to re-

linquish, without any equivalent, an annual income equal to that of a capital of three hundred thousand dollars, and then incur an expenditure probably of a million of dollars. In short, the project so far is abortive; and it is presumed, that a remonstrance was to be presented only in the event of any serious effort to carry the project into execution.

Until some such effort shall be made, therefore, the undersigned deem it inexpedient to exercise the power conferred on them, of calling another Town Meeting, or of submitting a remonstrance to Councils.

Paul Beck, Jr.	James Paul,
W. J. Duane.	Joseph S. Riley,
George Emerick,	Bernard B. Hazelton,
Edward Macpherson,	Thomas Fletcher,
Morgan Carr,	William H. Davis.

ROBINSON R. MOORE,
Secretary.

June 17, 1835.

RAIL WAYS—WATER POWER.

The Richmond Compiler publishes a description of a novel mode of applying the water power of rivers, suggested by Mr. Heron, Civil Engineer, at Richmond. If the application be practicable in the mode and to the extent described by Mr. Heron,—and we have no reason to doubt that it is,—the discovery is of no ordinary importance.

The principle is this:—to apply the water power accumulated at the locks of a Canal to a "breast wheel" or "pitchback," whereby four-fifths of the power will be available to set any machinery in motion. Let it, says Mr. Heron, be applied to an endless chain or rope, passing over suitable rollers along the line of a Rail way, after the manner of the stationary system of steam engines, we shall have a water power Rail way entirely free from the objections that can fairly be urged to the stationary steam engines, of the necessity of keeping up the fire and steam, &c.

Mr. Heron first enters into a calculation to show the force of the moving power, and comes to the result that between Covington and Richmond, a distance of two hundred and fifty miles, the water power of the James river would be adequate to the transit and delivery of three thousand eight hundred tons hourly.

He next makes an estimate of the cost of the application, substituting a granite tram way for the iron rail way, which is as follows for a power capable on the James river of delivering one hundred tons per hour.

Motive power, or proportionate cost of dams per mile,	$3,250
Ropes, a double line per mile,	1,800
Rope rollers, put up,	850
Broad granite or marble tram way, double track,	8,000
Grading and bridging per mile,	2,000
	15,900
Add ten per cent. for superintendence,	1,590
	$17,400

Mr. Heron invites men of science to investigate his proposed plan.

THE CROPS IN NORTHUMBERLAND.

The Miltonian of the 13th inst. says:—"The cut worm has been very destructive in this section of the country—entire fields of corn have been destroyed by this *mulish* insect: what is left looks promising—and Thursday night's rain has given new vigour to the prospects of the husbandman. There is a hope that the crops this season will not make more than half a failure."

OBSERVATIONS ON THE LIVERPOOL AND MANCHESTER RAIL WAY.

By Mr. David Stevenson, Edinburg—read before the Society of Arts for Scotland, 25th February, 1835.

The improvement of Rail way communication is now a subject of so much importance, that any observations relative to the construction of rail ways, or the best mode of conducting traffic on them, especially such as are elicited in the course of practical trials, will generally meet with some share of public attention. I, therefore, venture to address to this Society a few observations upon the Liverpool and Manchester Rail way, the most remarkable work of the kind hitherto executed, both as regards the rail way itself, and the means of traffic employed on it. These observations occurred to me during a late professional engagement on that work under Mr. Mackenzie of Liverpool; and though I do not think it necessary to give a lengthened account of the rail way, I trust that some of the facts which I have collected will be found sufficiently interesting to excuse me for having brought them under the notice of the Society.

The Liverpool and Manchester Rail way was opened on the 15th of September, 1830. Its formation and construction, including the erection of lodges, depots, and offices, is said to have cost about one million sterling, or at the rate of 33,300*l.* per mile; but as much of the work was not done by contract, this rail way cannot be taken as a criterion of the expense of operations of this nature, which now are executed at a much lower rate.

The whole length of the main line is thirty miles.—It forms a double way composed of four single tracks of rails, having several branches to towns and collieries on either side. These branches, in most instances, consist of only a single way, with passing places. Connected with the main line, there are many works of importance and interest, including three tunnels, sixty-three bridges, and several cuttings and embankments of great extent. The drainage of Chatt Moss, and the conveyance of the Rail way over that bleak and uncultivated tract of country, are also particularly worthy of notice; but as accounts of these works have already been made public, I shall not farther notice them.

Except at Whiston and Sutton Inclined planes, where the inclination is at the rate of one foot perpendicular to ninety-six horizontal, there is no part of the Liverpool and Manchester Rail way, more than one in 880; and the curves in no instance deviate from the straight line more than four inches in the chain, or 66 feet.—The inclination of one in 880 is hardly felt by the locomotive engines, and the curves are so gentle as to affect their progress very little. But the inclines of one in 96 on the main line, and several of the curves on the branch lines, prove formidable impediments, by diminishing the speed of the engines, and occasionally causing them to stop. The distance between the rails forming the tracks is 4 feet 8½ inches, and the distance between the two rail roads or ways is the same. The rails are of that form technically called *fish-bellied* edge rails; they are made of malleable iron, in lengths of 15 feet, and weigh at the rate of 35lb. to the yard. They measure 2 inches in breadth at the top, 2½ inches in depth at the chair, and 3½ inches in the middle.

It is worthy of remark, that, when these rails break, the fracture is generally a few inches from the part resting in the chair, and never in the thick part of the rail, between the points of support, which has led to the adoption of a parallel rail in all cases of repair. This rail weighs at the rate of 40lb. to the lineal yard. At every three feet the rails rest in a cast iron chair, which, including keys and spikes, weighs about 16lb. The chairs rest upon stone blocks in the cuttings where the ground is solid, and upon wooden *sleepers* on the embankments. The resting blocks contain 4 cubit feet of stone; two holes, 6 inches in depth and 1½ inch in diam-

eter, are drilled in them, and into these, oak treenails are driven, to which the chairs are spiked. The sleepers are of oak or larch, and contain about 1½ cubic foot of timber; they measure from 9 to 10 feet in length, and being laid across the road, each sleeper gives support to both rails. When sleepers are used, a seat is cut in them for the chair, which is simply spiked down to them. A piece of cloth or *felt* dipped in pitch is generally interposed between the chair and the stone blocks to make the seat more solid. The blocks occasionally split when the treenails are not driven home with care, but the sleepers are most frequently in want of repair and renewal.

The repair and keeping of the way was this year (1834) let by contract for 6000*l.* being at the rate of 200*l.* per mile. The contractor furnishes labor, chairs, keys, and spikes, while the Rail way Company furnish rails, blocks, and sleepers. They calculate upon having to renew one chair per mile per day, and 120*l.* per annum is taken as the outlay for keys and spikes. The workmen employed in repairing the rails, and keeping the road in order, are called *plate layers*, and the tear and wear is so great, that there is constant employment found for three men on every mile of the rail way. The *ballastings*, in which the blocks and sleepers are embedded, consist of sand and broken stone, and form a stratum of two feet in thickness.

The Rail way Company have had thirty-two locomotive carriages made, five or six of which are now out of use, and many of those at present on the road have been almost totally renewed. These carriages are all numbered and named. No. 1 is called the "Rocket." This engine was made by Messrs. Stephenson the engineers, and is that which did them so much honor in carrying off the prize of 500*l.* given by the Directors of the Liverpool and Manchester Rail way for the best locomotive carriage. It has been little used, and is still in good repair.

The locomotive carriages used at present on the rail way are of three kinds, and are called *train*, *luggage*, and *bank* engines. The train engines average about thirty horses' power. They weigh about eight tons, and cost about 900*l.* The luggage engines are in general thirty-five horses' power, and weigh about nine tons. They cost about 1000*l.* There are only two bank engines, the "Goliah," and the Samson," which are used for assisting the trains with passengers and luggage upon the inclined planes at Whiston and Sutton. They are about fifty horses' power, weigh about twelve tons, and cost about 1100*l.* The cylinders of these different engines measure from eleven to fourteen inches in diameter, and the length of strokes varies from sixteen to twenty inches. The carriages used for conveying water and fuel for the engine are called *tenders*; they have four wheels, and are yoked behind the engines.—They average when loaded about four tons weight, and cost about 150*l.* each.

The principle on which the boilers are constructed, is simple, and at the same time very efficient. For this invention, it is believed the Rail way Company are indebted to their treasurer, Mr. Booth. The shell or out side coating of these boilers consists of sheet iron, half an inch in thickness. Brass tubes, one-eighth of an inch in thickness, and from one to three inches in diameter, are rivetted or fixed into the end plates of the boiler, and being open at both extremities, allow the fire to pass freely through them. By this means a great surface of the water contained in the boiler and surrounding the tubes is exposed to the heat, and the steam is more quickly generated than in the common boilers.—A steel ring, about one-eighth of an inch in thickness, one inch in breadth, and slighly tapered, is driven into the brass tube, after it is fitted into the boiler plate, by which means the tube is wedged against the plate, and thereby rendered water and steam tight. The tubes are proved by means of a water pressure of 50 lbs. on the square inch, and notwithstanding this, they frequently burst. When this accident happens, the engineer stops both ends of the broken tube with wooden plugs. The mechanics connected with the rail way prefer the large tubes of three inches bore to the small ones, which are more apt to get choaked with soot and ashes. The boilers are generally seven feet long, and four feet in diameter, and contain about seventy or eighty of the small sized tubes. Round the boiler there is a *lagging* or casing of one half inch deal timber, fixed with iron hoops, which being a non-conductor, prevents the radiation of heat, and greatly facilitates the generation of steam, especially in frost, or in a damp state of the atmosphere. The time required for getting up the steam, even in the most improved boilers, is generally above an hour, when every thing is in a cold state.* The Act of Parliament, in consequence of the smoke raised by pit *coal*, enforces the exclusive use of *coke*, which increases the expense of fuel about 40 per cent.

The cylinders are horizontal in all the locomotive carriages, with the exception of two, in which they are vertical, and these are not found to answer so well, and require more repair; the cause of which may be satisfactorily explained in the following manner:—When the cylinders are vertical, the machinery cannot yield to the up and down motion of the piston rod, and has consequently to bear the whole shock; while, on the other hand, when the cylinders are placed horizontally, the motion of the piston tends to impel the carriage along the rails, by which the shock is deadened, and has not so injurious an effect upon the machinery. The objection to horizontal cylinders, founded upon the more rapid abrasion of the lower side of the piston by the effect of gravity, is not found to have much force in practice. In some carriages the piston rods are connected to the outside of the two fore-wheels, but in the improved engines they are connected to cranks on the axle of the carriage, in which case the cylinders are placed below the boiler, and are quite hid from view. On these engines also the wheels themselves are connected by rods, by which means the moving power is applied to four wheels instead of two, which doubles the adhesion of the carriage to the rails. The *cross-head* at the end of the piston rod, working in a slide produces the parallel motion. I may add, that some experiments were made on the Liverpool and Manchester Rail way, with Lord Dundonald's rotatory engine, which were of so favourable a nature, as to induce the Rail way Company to construct a locomotive carriage on that principle. I have not, however heard whether their efforts to introduce the rotatory system have proved successful.

The *fire-box*, consists of a double casting of metal, with an intervening space of about 4 inches. This space is filled with water, and has a free communication with the boiler, of which it may be said to form a part. It has a grated or ribbed bottom for holding the fuel, about nine square feet in surface. The *smoke-box* and the *funnel* are made of iron, and are indispensable for catching the dust and embers blown through the tubes, carrying off the smoke and steam, and causing a draught for the combustion of the fuel. In the improved engines, the waste steam is ingeniously blown into the tender, and heats the water for the supply of the boiler.

The framing in some instances is made of cast iron, but more generally of wood. It rest upon the axles, and supports all the machinery, together with the boiler and its accompaniments. Connected with it also are springs for rendering the motion as smooth as possible

* A member of the Society having mentioned, that on the Glasgow and Garnkirk Rail way, the steam is raised in 20 minutes, I think it necessary to remark, that the time stated in the text is dated from the first application of heat to the fuel, and is the result of many observations made by me while at Liverpool.

for the machinery. The carriages have generally four wheels; the "Atlas," however, and some others have six. In some carriages all the wheels are of the same size, and about five feet in diameter, while others have one smaller pair of wheels about four feet in diameter. The naves and rims are of cast iron, and the spokes and tires of malleable iron. Sometimes, however, the greater part of the wheels, like the framing, is made of wood.

It was lately suggested, as an improvement on locomotive carriages, to work the engines more slowly, and to produce the same or a greater speed by increasing the size of the wheels. Wheels of six feet in diameter were accordingly applied to one of the engines, but were found to produce an unsteady motion, and so greatly to increase the liability of the carriage to start off the rails or break down, that they were immediately discontinued. The rail way Company at present allow no wheels more than five feet in diameter to be used on the line. The greatest speed which the engines have been able to attain on a level, is sixty miles per hour, without a load. The Planet engine with her tender went from Liverpool to Manchester in forty-five minutes! being at the astonishing rate of forty miles per hour, including time lost in stoppages and ascending the inclined plane.

During the wet weather the engine wheels are found to adhere better to the rails than in dry weather, but if the rails are only damp or *greasy*, the wheels have a tendency to slide instead of rolling, and the carriages then have considerable difficulty in dragging along their loads. According to Mr. Booth's experiments, the adhesion of the wheels, in the most unfavorable state of the rails, is equal to one-twentieth of the weight supported by them. During frost, a loaded wagon is generally placed before the engine to rub off any ice or hoarfrost that may adhere to the rails. After the steam is thrown off, and the *break* or *drag* applied, in order to stop the trains, the time that elapses before they cease to move, is generally from 40 to 60 seconds, but this depends entirely on the state of the rails, and the rate at which the carriages are moving.

There are generally eight or ten engines at work on the line, each of which makes four trips a-day between Liverpool and Manchester, and on coming in at night the steam is blown off, and the machinery is thoroughly cleaned. At each end of the line the company have a depot, consisting of sheds, where the engines are repaired at the sight of an overseer or manager, and it is not a little remarkable that 200 men are employed in keeping these engines in good order. The carriages are daily in want of some small repair, but they generally run about eighteen months before receiving a renewal, or thorough repair. The "Vulcan," a train engine, ran no less than 47,000 miles before it required to be taken into the shed for repairs, and the "Fire-fly" ran 50,000 miles. I have never seen any correct account of the work done by the several engines, or the repairs made on them. According, however, to the rail way Company's reports, the expenditure connected with the locomotive power, exclusively of outlay for new engines, amounts to the extraordinary sum of about 28,000*l.* per annum. On visiting the Stockton and Darlington rail way in the month of November last, I learned, through the kindness of Messrs Pease, the promoters of this undertaking, that the engines running on that rail way very seldom required repair; although in their construction, and the workmanship employed on them, they fall greatly short of those in use on the Liverpool and Manchester line. But at Darlington the rate of travelling is only eight miles per hour, while at Liverpool twenty-five miles per hour is the usual speed; and hence we are fully warranted in supposing that the great tear and wear on the Liverpool and Manchester rail way may be chiefly attributed to the speed at which the engines are worked. Notwithstanding the smooth surface on which the carriages run, and the judicious use and application of springs, the tremor or shaking of the engines is very considerable, and is much increased with speed. When moving at the rate of twenty-five or thirty miles per hour, the tremulous motion of the engine becomes quite alarming to those unaccustomed to it.

The luggage engines perform a great deal of work, and generally bring in twenty loaded wagons, averaging 3½ tons each. With this load they move easily at the rate of twenty miles per hour on every part of the rail way, excepting at Whiston and Sutton inclined planes, where the effect of gravity reduces their power two thirds, and forces them to bring their load to the summit at two, and sometimes three trips, although assisted by the bank engines. They nevertheless make the journey, between Liverpool and Manchester in about two hours. Upon one occasion I saw the "Fury" engine with twelve loaded wagons, averaging 3½ tons each, ascend the Whiston inclined plane with the aid of the bank engine; its speed on the level was about thirty miles per hour, and when it reached the top of the incline, the velocity was diminished to about two or two and a half miles per hour. This inclined plane is a mile and a half in length, and its rise is at the rate of one in 96.

Some idea may be formed of the load these engines are capable of taking, and of the rate of charges and expenses of fuel, from the fact, that, during my stay in Liverpool, the "Atlas" engine brought in forty-seven wagons, being a load of 160 tons, for which the company's charge would be 70*l.* sterling, or at the rate of 1*l.* 10*s* per wagon. It is, I believe, calculated that the combustion of half a pound of coke will produce steam sufficient to carry one ton one mile, at the rate of travelling adopted on this rail way, so that the conveyance of one ton from Liverpool to Manchester require about 15 lb. of coke, the cost of which is about 2d. The expense, therefore, of fuel for bringing 160 tons from Manchester to Liverpool, according to this calculation, may be taken at 1*l.* 10*s*. while the company's charge for carriages is 70*l.*; so that the chief expenditure, after the interest of the first cost of the rail way, is in keeping the engines and rail way in pair.

The second class train makes the journey in two hours, and has generally eight or ten carriages, which are open, and each seated for twenty-four persons.—There are nineteen stations on the line where this train regularly stops, for the accommodation of passengers; and at each station there is a watchman, who makes signals if he sees cause for stopping the train. The signals are made during the day by red flags, and by lights after sunset.

The first class train makes only one stoppage, at Newton, to take in fuel and water, and performs the journey of thirty miles in an hour and a half. The coaches in this train are framed and covered like handsome road carriages, and are seated for eighteen passengers, with the exception of the rail way mail coach, which goes at the end of the first class train, and is seated for twelve persons. The charge for passengers from Liverpool to Manchester by the first class train in the mail is 6*s* 6*d*, and in the other carriages 5*s* 6*d*. In the second class train, the fare, by the close carriages, is 5*s* 6*d*, and by the open ones 4*s*. The weight of luggage allowed to each passenger is 60 lb. beyond which a charge is made at the rate of 3*s* per cwt. The charge for conveying a four wheeled road carriage is 20*s*, and a two wheeled carriage 15*s*. One horse is charged 10*s*, two horses 18*s*, and three horses 22*s*. About one thousand and twenty passengers, and six hundred and forty tons of goods are daily transported along the rail way.

Each engine carries two men, an engineer and a fireman, who have respectively 5*s* and 2*s* 6*d* a day. As a check upon their regularity, a fine of 2*s* 6*d* is imposed on the engineer for every fifteen minutes he arrives *before* his time. There is a *breaksman* with the luggage train, and the trains for passengers carry two guards.

The occurrence of accident is not so frequent as might be imagined, as the great weight of the carriages prevents them from easily starting off the rails; and so great is the momentum acquired by these heavy loads moving with such rapidity, that they easily pass over considerable obstacles. Even in those melancholy accidents where loss of life has been sustained, the bodies of the unfortunate sufferers, though run over by the wheels, have caused little irregularity in the motion, and the passengers in the carriages have not been sensible that any impediment has been encountered on the road. For the prevention of accident, some arrangements have been adopted, by which the north rails are exclusively allotted for engines going towards Manchester, the south being for those going towards Liverpool.

The rail way business is conducted by twelve directors, who give a half-yearly report on the income and expenditure; and a dividend of nine per cent. per annum has been declared for payment. At present, the rail way is in use only during the day; but by conveying goods during the night, provision may be made for a great increase of traffic, without incurring expense in the execution of new works.

Edinburgh, 21st Feb. 1835.

From the Philadelphia Gazette and Intelligencer.

JAUNT FROM PITTSBURGH TO PHILADELPHIA.

Mr. Editor:—Having recently made a trip from Pittsburgh to this city, along the whole line of our great improvement, and having experienced great pleasure and astonishment at what I saw, and what we Pennsylvanians possess, I have been induced to give you a hasty sketch of what a traveller may expect who journeys that way, and for no other object than to *promote the intercourse between Philadelphia and Pittsburgh*. Having travelled over every route that the mountains can be crossed, and feeling a desire to examine our public works; I left Pittsburgh on Monday night at 10, in the Pioneer Packet line, expecting little comfort, rough fare and tedious travelling; how far I was disappointed in my expectations, you shall be informed. You enter an omnibus at your lodgings, and are conveyed to the canal basin, at the termination of the costly aqueduct, that carries the waters of the canal over the La Belle Allegheny into the city. I there found the beautiful Packet Boat Pittsburgh, well filled with passengers, almost ready to start. A few minutes examination of her capacity and qualities, dispelled many doubts that had existed in my mind, as to my own personal comfort. The bugle sounded, crack went the whip over three most beautiful horses, and a few minutes sufficed to place us on the other side of the river. The moon was up, and as we journeyed along the canal, we had a fine view of the city, and the numerous towns and villages that surround it. Thirty miles from Pittsburgh, after passing the town of Freeport, crossed the Allegheny again over an aqueduct, as the sun was rising, which enabled those who are fond of "stirring with the lark," to observe the beauties of both nature and art, at one view elegantly combined. The boat now entered the Kisskiminatass—our speed was much accelerated in the slack water. The craft not meeting with the same resistance within the confined dimensions of the canal —on she moved, passing rapidly by scenery that would delight for hours. As you further progress on this beautiful pool, you commence entering what is called the salt region, and as you gaze on either bank, a dingy salt manufactory presents itself. I think I am safe in saying an hundred. This article, that gives zest to the food of millions, is sent from here in great quantities to the general mart at Pittsburgh. Innumerable coal pits are opened along the shore, to supply the works, with fuel as they are all conducted on the "boiling system."

Before reaching Warren, 42 miles from Pittsburgh, your sight is attracted by the appearance of enormous rocks laid bare; they appear as if the earth had abandoned them for countless ages. Numerous little mountain streams may be seen running and leaping from rock to rock, and then not flowing into the river quietly, to pay tribute, but dashing as a bold invader, as if to give battle. Numerous boats now passed on their way, laden with every description of goods for the far west.

On the tops of many were seen the rich ore of the Juniata in blooms, destined to pass through the rolling mills of the Birmingham of America. The tunnel, six miles from Saltsburgh, a cut of 840 feet through, is an admirable piece of work. You glide through this subterranean avenue, and have scarcely time to imagine yourself in the bowels of the earth, ere you again behold the blessed sun.

Blairsville, 73 miles from Pittsburgh, is a beautiful town, having been mainly built within a few years. It exhibits a modern and cheerful appearance. From the town, you pass on through as picturesque scenery as the most fastidious lover of the sublime and beautiful could require. The bugleman, in attempting to enliven the scene, murdered most horribly some airs of Rossini. I thought at the time, that if the aborigines were again on the banks of the river which they must have loved, that we might pass on without fear of molestation, as such terrific discord would alone have put them to flight. He acquitted himself, however, very creditably, when he curbed his blasts down to 'Zip Coon,' 'Jim Crow,' and that universal tune, 'Buonaparte crossing the Rhine.'

Being in a cheerful mood, I determined to be pleased with the arrangements of the line, and commenced propounding to myself a few questions. One very important one was, whether this route would not, ere long, become a fashionable tour for the spring and summer months? I made up my mind at once to the fact, and predicted, on the spot, that three short years would not elapse, ere Philadelphians would be as plenty on these romantic streams, as the stately sycamores are on their banks. The works are of greater magnitude than those of New York state; the expenditure for their completion has been almost double—the scenery is never monotonous, as you must find it on the New York Canals, but is always grand, and beautifully diversified. Niagara is the feature of their trip—the scenery, the works of art, and the views of the Allegheny, the Monongahela and the Ohio ours. But to make this trip, you will ask what can you expect within the confined limits of 12 feet by 80? Some will exclaim, not much.—I say, entertain your opinion, for the agreeable nature of your disappointment will be immense.—Let me enumerate the conveniencies of this little floating hotel. First, you have a promenade deck the entire length of the boat, on which you may sit, walk, read, admire the beauties of nature in all her surpassing loveliness, or skulk at one end, as you should do, and puff off a good Havanna. Next, the cabin has its attractions—good seats, tables, books, the newspapers of the day to amuse you. The ladies, they have a snug little cabin of their own, the curtains of which are similar in colour to those mentioned by the authoress of the last journal. They besides are favoured with a portion of the boat as a sitting parlour, neatly fitted up. No gentleman usually enters there, except those who may have ladies under their protection. The epicure will ask, how is the 'table,' and answers himself by saying rough enough. But to this I say emphatically, no such thing. The table is covered with as good fare, as a majority of the hotels of our city.

If any Philadelphians should, in a happy moment determine on journeying that way, but cannot make up his mind to dispense with lobsters, oysters, shad, rock, sheep head, &c., I will recommend him as a friend of his comfort and his exquisite stomach, to remain within the sound of Christ Church bells. But if he can put up with good beef, mountain mutton, veal, the fowls both

of earth and air, and the treasures of the limpid stream, he may have them in view together with abundance of vegetables, and as good pastry as he ought to eat. Then I advise him to leave for a brief period the bustle of a great city, and revel to satiety on the various natural objects of grandeur that will ever and anon strike on his astonished sight. Some of my friends on board, were as anxious to hear the tinkling of the dinner bell, as a holder on change would be to find his stock had advanced. Several have I observed peeping into the clean little place called the kitchen, reconnoitering the enemy they intend to attack. The cook is esteemed by all on board, after the first meal, as quite an *artiste*, and ranks as high in consequence of the piquant sauces he uses, called *mountain air* as did ever *Ude* among the good livers of Europe.

Another will say (a real confirmed dyspeptic,) oh, I care nothing about eating, it is what I want to avoid,—but how, in the name of all the sleepy Gods at once, do you manage to get your *natural rest*. Now this is a question not easily answered, because it is more than probable he has been accustomed to *unnatural* rest.—If so, he may depend on it, that he will be able to get his *natural rest*, and not a moment more; up he must get at dawn of day, ring goes the bell, down goes the passengers, and the cabin in a few minutes is itself again;—but to be more particular—the sleeping apparatus is ingeniously got up. There are three tiers of hammocks, or carcase recipients; the lower one is formed by turning over the seats around the cabin, the two above, are suspended like the Prophets' coffin, between heaven and earth, in one of which, if nature is really tired, you may find a restorer in "balmy sleep;" but if the contrary is the case, and sleep does not heavily weigh your eyelids down, you will twist and turn, grumble, &c. until

'Tis midnight—yet not a nose
Enhales the essence of repose.'

Then the boat will enter a lock—open go the sluces, and a roar ensues, that is only outroared by terrific Niagara.

To put this subject to *rest*, I will merely observe to those who have become effeminate from burying themselves in soothing pillows and beds that would rival the Cygnet's down in softness, that all that can be obtained in lieu of those luxuries, is the *disposition* that you will irresistably feel to get your *natural rest*. But even regarding this as an inconvenience, it has *safety* to recommend it, that no other mode of travelling possesses; look at the almost daily notices of accidents in stages and steam boats. As a mode of overcoming the mountains, it is at once the most pleasant and safe. The invalid, if discreet, must prefer this mode, for fatigue is banished from the trip. The literati will join him in praising, where he is afforded a chance of pursuing his favorite studies. Even the *bon vivant* will be delighted, as he will have a well stocked bar ready to supply him with most of the favorite drinks that are in vogue at the present day. The temperance man can be furnished with iced lemonade, and the lover of the malt may see the white effervescence tip the red.

Passing through Lockport and Centreville, you arrive at Johnston in Cambria county 103 miles from Pittsburgh, you enter the largest canal basin in Pennsylvania, it is lined with warehouses for the reception of goods. Leaving Johnston, you ascend the stately Allegheny by inclined planes, and move through a Tunnel cut through a solid rock to the level; you then take a locomotive, and go over the 13 miles in less than an hour, and descend by inclined planes to the beautiful Town of Hollidaysburg, 38 miles from Johnston and 141 from Pittsburgh. Too much praise cannot be bestowed on those gentlemen who have charge of the Portage, every thing is ready, and the mountain, notwithstanding its formidable appearance, is easily passed. At Hollidaysburg you again take the Packets, passing through the villages of Williamsburgh and "Water-street," you enter the Canoe Valley, in sight of a mountain of the same name, you are now on one of the lovely glassy pools of the Juniata; no description can well convey an adequate idea of the singular beauty and wildness of this region. The "Vertical" or "Tower Rock" is now in sight, standing alone as the father of the Valley, surveying his proud estate. After getting a sight of Huntington, a large town 119 miles from Pittsburgh, you enter the flourishing county seat of Mifflin, called Lewistown; after leaving you get into the long Narrows, where many Union Canal boats were passing from the Rail Road to discharge their freights, brought from Philadelphia. The large quantities of decomposed rocks, on the mountains between Lewistown and Mifflin, will not fail to attract the eye of the traveller. When you come in sight of Columbia, a traveller from the West considers his journey over. Columbia is 351 miles from Pittsburgh, 82 from Philadelphia, by Rail Road, making the whole distance of the route 443 miles performed within four days. After viewing the scenery around Columbia from the Bridge which is worthy the attention of all who visit that place, I entered the car attached to their best Locomotive, and reached Philadelphia in six hours from Columbia; part of the distance was peformed at the rate of 21 miles an hour.

C.

Early and large Cucumbers.—Many of our gardens in this place present a very flourishing appearance, considering the former backwardness of the season. Mr. Hardy, whose skill in gardening deserves commendation, already has cucumbers which measure 11 inches in length, eight inches in circumference, and weigh 1¼ lbs. together with cantelopes in a state of great forwardness.—*Miners' Jour.*

From the Commercial List.

COLUMBIA RAIL ROAD.

Amount of articles transported on the Columbia Rail Road, during the month of May, 1835.

ARRIVED.

Flour	bbls.	7,607
Grain	bushels,	3,610
Bacon	pounds,	586,802
Lard and Tallow	do.	45,411
Provisions not specified	do.	15,036
Feathers	do.	4,300
Wool	do.	2,564
Cotton	do.	4,950
Tobacco	do.	306,051
Leather	do.	57,053
Furs and Peltrys	do.	63,724
Whiskey	gallons,	15,280
Merchandise	lbs.	53,232
Oil	gallons,	476
Furniture	pounds,	22,898
Window glass	boxes,	682
Rags	pounds,	20,239
Iron	do.	238,754
Lead	do.	2,000
Copper and tin	do.	2,491
Marble	do.	308,515
Lime	bushels,	4,452
Sawed lumber	feet,	205,787
Staves, heading and hoop poles	lbs.	59,260
Shingles,	number,	180,100
Sundries	pounds,	56,625

DEPARTED.

Fish	bbls.	298
Butter and cheese	lbs.	6,604
Salt	bushels	1,728
Provisions not specified	lbs.	706

Wool	pounds	3,000
Cotton	do	26,659
Tobacco	do	22,399
Leather	do	8,793
Hides	do	33,555
Whiskey	gallons	1,053
Merchandize,	lbs.	1,309,157
Groceries	do	747,526
Oil	gallons	2,896
Drugs and dyestuffs	lbs.	50,710
Gypsum	tons	151
Furniture	pounds	72,454
Window glass	half boxes	155
Rags	pounds	40,445
Coal	tons	121
Iron	pounds	93,702
Lead	do	916
Copper and Tin	do	13,968
Marble	do	13,059
Bricks	number	18,196
Sawed lumber	feet	2,100
Sundries	pounds	111,422
Cars cleared	number	1,380

Tolls received, $9,668 12.

DAVID W. WRAN, W. M.

AUCTION DUTIES.

Paid during the last three months.

George Thomas,	$7701 34
Wm. Folwell, Jr.,	4596 56
S. W. Lippincott,	3336 88
H. Copperthwait,	1819 42
Wm. Baker,	741 90
C. J. Wolbert,	691 03
T. W. L. Freeman,	123 20
S. Poulterer,	57 78
Geo. W. Smith,	34 86

We yesterday saw in front of our office a beautiful lot of bar iron, which was manufactured at Victoria Iron Works, Dauphin County, by Franklin E. Wright, & Co. from ore found near this place. The ore was taken fram the mine and transported 16 miles above Harrisburg and returned here, in eight days time. In mentioning this fact, we wish also to state, that previous to the completion of the public works, there was no inducement to dig the ore in this township, of which there is an inexhaustible supply. Now, we understand, six furnaces are supplied with it, and not less than 50 tons are daily weighed in our sight. In this can be seen a striking benefit derived from internal improvements, and, as was remarked to us, an illustration of the fact, that "canals make their own work." The ore is of very superior quality, yielding about 65 per cent.—*Columbia Spy.*

From the Washington (Pa.) Reporter.

WOOL.

On Saturday a brisk business was done in the Wool line in this borough. Sixty cents per lb. are now offered for full blood, and a proportionate advance on inferior grades. We inspected a lot sold by Jesse Kenworthy, of East Bethlehem township, on Thursday last, for 62½ cents per lb. and agreed in the opinion expressed by all those who have examined it, that it is the best lot of Wool ever brought to our market. In quality it is about the same grade as our best flocks; but the manner in which it has been handled and put up gives it all the whiteness and firmness of a bale of cotton. Wool growers do not sufficiently attend to this matter. Manufacturers are always willing to give from three to four cents more per pound, for wool well washed and handled. Mr. Kenworthy washes his sheep in the river; and notwithstanding the thorough washing given them, the fleeces averaged over three pounds.

WOOL.

The Washington (Pa.) Reporter says—"The wool crops of this county may be fairly estimated at 600,000 lbs. which at 55 cents, the average price paid this season, would bring into the county $360,000."

From the Pittsburg Gazette.

PATENT SAFETY GUARD.

MR. CRAIG—I was much pleased to learn that Capt. Acheson, of the steamer George Collier, has embraced the opportunity afforded him of attaching to his engine our valuable citizen, Mr. Cadwallader Evans' "Patent Safety Guard against explosion of Steam Engine Boilers," which is without doubt, a valuable acquisition to his spendid vessel. It will relieve passengers accustomed to steam boat travelling from any apprehension of danger; and to those heretofore timid and alarmed about the dangers of steam, it will be a sure guarantee of safety, as the Safety Guard *must* act the instant the boilers get over their proper temperature, and give notice of danger in sufficient time to prevent explosion, without the least precipitation of the engineer.

Every commander of a steam boat should, without hesitation, imitate Captain Acheson's promptitude, and thus secure the perfect ease of their passengers; and to their boats a sure safe guard against such awful calamities as have occurred with engineers in whom every confidence has been placed. Several scientific gentlemen have witnessed the operation of the one in use at the P. S. Mill, and with certificates of some of the first engineers of Philadelphia, show the utility of the "Safety Guard."

Mr. Evans has devoted his whole life to the study of Steam, and has made several valuable improvements in the steam engine, and being raised under the eye and receiving instruction from his father, Oliver Evans, well known as the greatest of engineers, should therefore be most competent to do justice to such an invention. F.

THE POCAHONTAS, CAPT. WEST.

A friend has favoured us with the following extract of a letter from a gentleman of this city, who went to Liverpool in the Pocahontas:—"We left the Capes of Delaware on Wednesday, the 22d day of April, between twelve and one o'clock, noon, and were within thirty miles of Liverpool, waiting for a pilot, on Sunday, the tenth of May, and should have been ashore early in the day, but the said guide did not reach us till eleven at night,—thus a day was lost. Our voyage was made in *eighteen days.* We landed this morning, the eleventh, before breakfast, which makes but the nineteenth day.

Extract of a Letter, dated, Chicago, June 5, 1835

Dear Sir—I arrived here, early in May, in good health—and on the 2d of June received the remainder of the boxes and packages forwarded from New York on the 20th of April—a part of them having arrived on the 25th of May. This delay is owing, mainly, to the ice, which so long *blockaded* the port of Buffalo. Merchants here have not yet received all their goods—although those at *Peoria*, about one hundred miles from here, HAVE HAD THEIRS, BY THE WAY OF PHILADELPHIA, SIX WEEKS. When our canal to Peoria shall be completed, we shall be able to receive all our goods from Philadelphis through Pittsburgh, the Ohio and Illinois river and canal, earlier than by Lake Erie, unless there is some other channel than the New York canal.

LB D '05